



SEQUENCE LISTING

<110> Gould-Rothberg, Bonnie E.
DiPippo, Vincent A.
Ramseh, Tennore M.
Gerwein, Robert W.

<120> METHOD OF IDENTIFYING TOXIC AGENTS USING NSAID-INDUCED
DIFFERENTIAL GENE EXPRESSION IN LIVER

<130> 15966-601 Utility

<140> 09/717,321

<141> 2000-11-20

<150> 60/166,923

<151> 1999-11-22

<160> 50

<170> PatentIn Ver. 2.1

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<211> 123

<212> DNA

<213> Rattus norvegicus

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<210> 3
<211> 484
<212> DNA
<213> Rattus norvegicus

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<220>
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<222> (455)
<223> Wherein n is g or a or t or c

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<210> 4
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<212> DNA
<213> Rattus norvegicus

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cagcagccca gtaagctgtg ccagaaggct gtaacagtag cggagccagt gacagcgcca 180
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cgggggccac tactatgtgc ggcagccagg ggtcncctca gccggaagcc atcaggatgt 480
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tcacaacccc acagggcccc tcggggccaca aacaccgtgt ggccccagtg gtttgaagcc 600
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<212> DNA
<213> Rattus norvegicus

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agaagggcat gctccagctc ctgcaggaca aggatctctg cagctggctc ctgaaggaaa 180
agagtgcac cagtgagaag aggagattcc tgaaggagcg gttggcaagg ctggcccaag 240

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256

<210> 6
<211> 369
<212> DNA
<213> Rattus norvegicus

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ccacacagct gggaccaggg cgcttcctaaa tgaccagga agtggtttgt gacgagtgcc 180
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gagatggcat ggagtacccc ttatttggag aaggtgagcc tcatgtggat ggggaacccg 300
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<211> 167
<212> DNA
<213> Rattus norvegicus

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gcaaaacctt agaaaccctc ctggagctca aaggcatccg gactagt 167

<210> 8
<211> 594
<212> DNA
<213> Rattus norvegicus

<400> 8
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aagagcatct gcaaaggaaa tcaatcttca gagaatagca cagaaacaga aaatccaagc 180
gaacaaaaag atacatctag gccgtgttct tgttctgacc agggccgcat ttggcaaagc 240
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ttagtgcaaa accttagaaa ccctcctgga gctcaaaggc atccggacta gttttgtact 480
taaacaggat acgggtaaac cacttaaaat ttgccatctc tgcccaaagt gtttgcatga 540
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<210> 9
<211> 340
<212> DNA
<213> Rattus norvegicus

<400> 9
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ccggagcaca caggctgagc gtgccacagc gacgacggag gccaaagcgtg gtgctgggtgg 300
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<212> DNA
<213> Rattus norvegicus

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<210> 11
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<212> DNA
<213> Rattus norvegicus

<220>
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<222> (545)
<223> Wherein n is g or a or t or c

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cc 782

<210> 12
<211> 1025
<212> DNA
<213> Rattus norvegicus

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catgg 1025

<210> 13
<211> 256
<212> DNA
<213> Rattus norvegicus

<400> 13
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aattcaagac attgttccac acaatgaaca atcgcacaca tgagaactgc acctagaatg 180
tccatcctag aatctccatc catccagtca aagtgtctgag ctactgact gaaggaaaca 240
tgacctgtgt tctaga 256

<210> 14
<211> 579
<212> DNA
<213> Rattus norvegicus

<400> 14
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ggtgttcaaa aatttcccca atgtttgttc tggacacaat tggtataagc caactcgggtg 120
aattcaagac attgttccac acaatgaaca atcgcacaca tgagaactgc acctagaatg 180
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<210> 15
<211> 1017
<212> DNA
<213> Rattus norvegicus

<400> 15

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<211> 1022

<212> DNA

<213> Homo sapiens

<400> 16

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<210> 17

<211> 348

<212> DNA

<213> Rattus norvegicus

<400> 17

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cgctagtgtt aacgccgttc tgtacaacct aactcactgg caagaacaca gtgttggggc 180
tttcgaccac tagaacaac ttttttcaat tgacagttgc agaattgtgg agtgttttta 240
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cattgatctt ttgctaatgc agttagcagt atgttttgca tgtatgactt aataaatcct 300
tgaatcataa aaaaaaaaaa aaaaatgtct ttggaacttg aaaaaaaa 348

<210> 18
<211> 352
<212> DNA
<213> Homo sapiens

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<210> 19
<211> 484
<212> DNA
<213> Rattus norvegicus

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<210> 20
<211> 161
<212> PRT
<213> Rattus norvegicus

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20 25 30
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35 40 45
Gln Ser Leu Arg Val Thr Met Ala Thr His Pro Asp Gly Phe Arg Leu
50 55 60
Glu Gly Pro Leu Ala Ala Ala His Ser Ser Gly Pro Arg Thr Val Leu
65 70 75 80
Tyr Glu Gly Pro Val Arg Gly Leu Cys Pro Leu Ala Pro Arg Asn Ser

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Asn Thr Met	Ala Ala Ala Ala	Leu Ala Ala	Pro Ser Leu	Gly Phe Asp	
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Arg Val Ile	Gly Val Leu Val	Ala Asp Leu Ser	Leu Thr Asp	Met His	
	115		120	125	
Val Val Asp	Val Glu Leu Thr	Gly Pro Pro	Gly Pro Thr	Gly Arg Ser	
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Thr					

<210> 21
 <211> 161
 <212> PRT
 <213> Caenorhabditis elegans

<400> 21	
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Leu Trp Gly Ala Asn Asp Ile Gln Lys Met Ala Asp Val Gly Ser Leu	
35 40 45	
Lys Gly Leu Thr Val Thr Met Ile Lys His Pro Thr Ser Phe Lys Leu	
50 55 60	
Gly Ser Pro Leu Phe Glu Ile Asn Glu Lys Ala Lys Leu Glu Glu Thr	
65 70 75 80	
Asn Glu Thr Val Leu Tyr Glu Gly Ser Val Arg Gly Leu Cys Pro Leu	
85 90 95	
Ala Pro Asn Asn Val Asn Thr Met Ala Gly Gly Ala Leu Ala Ala Ser	
100 105 110	
Asn Leu Gly Phe Asp Glu Val Lys Ala Lys Leu Ile Ser Asp Pro Lys	
115 120 125	
Met Thr Asp Trp His Val Val Glu Val Arg Val Glu Gly Asp Asp Gly	
130 135 140	
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Thr	

<210> 22
 <211> 1019
 <212> DNA
 <213> Rattus norvegicus

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 gtccagttgg agaaccagat ggtgttgggt cagaccactt tgcccagcca ggaggtgcaa 240
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 tgctcctgtg atgggctcac tatctgggag gagcagaggc ggcccattgc tggccaaggc 840
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 agtctccta gctgaacatc ttctgcaga gggagcctca agcccttgct tgtataggcc 960
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<210> 23
 <211> 878
 <212> DNA
 <213> Rattus norvegicus

<400> 23
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 gttccacaag agggaaacct gatgtggcta agctcaatgg ggattggttt tctattgtcg 180
 tggcctctaa caaaagagaa aagatagaag agaatggcag catgagagtt tttatgcagc 240
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 ttgctcttgc agttcaataa atgattaccc ttgcactt 878

<210> 24
 <211> 256
 <212> DNA
 <213> Rattus norvegicus

<400> 24
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 ccagccacat tccattgatc atccagtatt tcattctgaa gatgtttgct gagaagctgc 120

agaagggcat gctccagctc ctgcaggaca aggattcctg cagctggctc ctgaaggaaa 180
 agagtgcac cagtgagaag aggagattcc tgaaggagcg gttggcaagg ctggcccaag 240
 ctcagcgag gctagc 256

<210> 25
 <211> 84
 <212> PRT
 <213> Rattus norvegicus

<400> 25
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 Asn Cys Ile Ser Ser His Ile Pro Leu Ile Ile Gln Tyr Phe Ile Leu
 20 25 30
 Lys Met Phe Ala Glu Lys Leu Gln Lys Gly Met Leu Gln Leu Leu Gln
 35 40 45
 Asp Lys Asp Ser Cys Ser Trp Leu Leu Lys Glu Lys Ser Asp Thr Ser
 50 55 60
 Glu Lys Arg Arg Phe Leu Lys Glu Arg Leu Ala Arg Leu Ala Gln Ala
 65 70 75 80
 Gln Arg Arg Leu

<210> 26
 <211> 84
 <212> PRT
 <213> Rattus norvegicus

<400> 26
 Met Asp Glu Ile Phe Gln His Leu Asn Ala Tyr Arg Gln Glu Ala His
 1 5 10 15
 Asn Cys Ile Ser Ser His Ile Pro Leu Ile Ile Gln Tyr Phe Ile Leu
 20 25 30
 Lys Met Phe Ala Glu Lys Leu Gln Lys Gly Met Leu Gln Leu Leu Gln
 35 40 45
 Asp Lys Asp Ser Cys Ser Trp Leu Leu Lys Glu Lys Ser Asp Thr Ser
 50 55 60
 Glu Lys Arg Arg Phe Leu Lys Glu Arg Leu Ala Arg Leu Ala Gln Ala
 65 70 75 80
 Gln Arg Arg Leu

<210> 27
 <211> 368

<212> DNA
 <213> Homo sapiens

<400> 27
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 caccagctg ggcctgggc gcttccaaat gaccaggag gtggtctgcg acgaatgcc 180
 taatgtcaaa ctagtgaatg aagaacgaac gctggaagta gaaatagagc ctggggtgag 240
 agacggcatg gagtaccct ttattggaga aggtgagcct cacgtggatg gggagcctgg 300
 agatttacgg ttccgaatca aagttgtcaa gcaccaata tttgaaagga gaggagatga 360
 tttgtaca 368

<210> 28
 <211> 121
 <212> PRT
 <213> Rattus norvegicus

<400> 28
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 1 5 10 15
 Arg Asn Lys Pro Val Ala Arg Gln Ala Pro Gly Lys Arg Lys Cys Asn
 20 25 30
 Cys Arg Gln Glu Met Arg Thr Thr Gln Leu Gly Pro Gly Arg Phe Gln
 35 40 45
 Met Thr Gln Glu Val Val Cys Asp Glu Cys Pro Asn Val Lys Leu Val
 50 55 60
 Asn Glu Glu Arg Thr Leu Glu Val Glu Ile Glu Pro Gly Val Arg Asp
 65 70 75 80
 Gly Met Glu Tyr Pro Phe Ile Gly Glu Gly Glu Pro His Val Asp Gly
 85 90 95
 Glu Pro Gly Asp Leu Arg Phe Arg Ile Lys Val Val Lys His Arg Ile
 100 105 110
 Phe Glu Arg Arg Gly Asp Asp Leu Tyr
 115 120

<210> 29
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 29
 Glu Val Thr Leu Glu Glu Val Tyr Ala Gly Asn Phe Val Glu Val Val
 1 5 10 15
 Arg Asn Lys Pro Val Ala Arg Gln Ala Pro Gly Lys Arg Lys Cys Asn
 20 25 30
 Cys Arg Gln Glu Met Arg Thr Thr Gln Leu Gly Pro Gly Arg Phe Gln

35	40	45
Met Thr Gln Glu Val Val Cys Asp Glu Cys Pro Asn Val Lys Leu Val		
50	55	60
Asn Glu Glu Arg Thr Leu Glu Val Glu Ile Glu Pro Gly Val Arg Asp		
65	70	75 80
Gly Met Glu Tyr Pro Phe Ile Gly Glu Gly Glu Pro His Val Asp Gly		
85	90	95
Glu Pro Gly Asp Leu Arg Phe Arg Ile Lys Val Val Lys His Pro Ile		
100	105	110
Phe Glu Arg Arg Gly Asp Asp Leu Tyr		
115	120	

<210> 30
 <211> 184
 <212> DNA
 <213> Rattus norvegicus

<400> 30
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 gtgcattctg tgtgaaactc aataaattca attttataat ctttttttaa aaaaaaaaaa 180
 aaaa 184

<210> 31
 <211> 183
 <212> DNA
 <213> Mus musculus

<400> 31
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 aaccatgtga tgttaactat tattaataaa ttttaacttt ttttttcaa aaaaaaaaaa 180
 aaa 183

<210> 32
 <211> 184
 <212> DNA
 <213> Mus musculus

<400> 32
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 aaccatgtga tgttaactat tattaataaa ttttaacttt ttttttcaa aaaaaaaaaa 180
 aaaa 184

<210> 33
 <211> 42
 <212> PRT

<213> Rattus norvegicus

<220>

<221> VARIANT

<222> (31)

<223> Wherein Xaa is any amino acid as described in the specification

<400> 33

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His Ser Gln Glu His Leu Gln Arg Lys Ser Ile Phe Arg Glu Xaa His
20 25 30

Arg Asn Arg Lys Ser Lys Arg Thr Lys Arg
35 40

<210> 34

<211> 48

<212> PRT

<213> Drosophila melanogaster

<400> 34

Tyr Lys Val His Ser Lys Val His Lys Ala Arg Met Asp His Ser Pro
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Arg Ser Lys Asp Arg Lys Asp Arg Lys Gly Arg Lys Ala His Ser Lys
20 25 30

Ile His Lys Asp Tyr Ser Arg Asn Arg Lys Asp His Arg Val Arg Lys
35 40 45

<210> 35

<211> 382

<212> DNA

<213> Rattus norvegicus

<400> 35

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ccatatgctg gaaccgcgga agccgtcaaa gccctgggtg ccaagcactg tgtgaagggt 180
gtgaccgaag ctcacgtcga ccagaaaaac aaggtgggtc ccaccccggc cttcatgtgt 240
gagaccgaac tccaccacat ccacgacggg attggggcca tgggtgaagaa ggtgctggaa 300
ctcacgggaa agtaacacca ccagcaccac gcttggcctc cgtcgtcgct gtggcacgct 360
cagcctgtgt gctccggtca gc 382

<210> 36

<211> 385

<212> DNA

<213> Homo sapiens

<400> 36
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ccttatgccg ggaccgcaga ggccatcaag gccctgggtg ccaagcactg cgtgaaggaa 180
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gagacggcac tccactacat ccatgatggg atcggagcca tggtaggaa ggtgctggaa 300
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<210> 37
<211> 104
<212> PRT
<213> Rattus norvegicus

<400> 37
Glu Phe His Gly Ala Lys Lys Pro Ile Gly Leu Cys Cys Ile Ala Pro
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Val Leu Ala Ala Lys Val Ile Lys Gly Val Glu Val Thr Val Gly His
20 25 30
Glu Gln Glu Glu Gly Gly Lys Trp Pro Tyr Ala Gly Thr Ala Glu Ala
35 40 45
Val Lys Ala Leu Gly Ala Lys His Cys Val Lys Gly Val Thr Glu Ala
50 55 60
His Val Asp Gln Lys Asn Lys Val Val Thr Thr Pro Ala Phe Met Cys
65 70 75 80
Glu Thr Glu Leu His His Ile His Asp Gly Ile Gly Ala Met Val Lys
85 90 95
Lys Val Leu Glu Leu Thr Gly Lys
100

<210> 38
<211> 104
<212> PRT
<213> Rattus norvegicus

<400> 38
Glu Phe His Gln Ala Gly Lys Pro Ile Gly Leu Cys Cys Ile Ala Pro
1 5 10 15
Val Leu Ala Ala Lys Val Leu Arg Gly Val Glu Val Thr Val Gly His
20 25 30
Glu Gln Glu Glu Gly Gly Lys Trp Pro Tyr Ala Gly Thr Ala Glu Ala
35 40 45
Ile Lys Ala Leu Gly Ala Lys His Cys Val Lys Glu Val Val Glu Ala
50 55 60

His Val Asp Gln Lys Asn Lys Val Val Thr Thr Pro Ala Phe Met Cys
65 70 75 80

Glu Thr Ala Leu His Tyr Ile His Asp Gly Ile Gly Ala Met Val Arg
85 90 95

Lys Val Leu Glu Leu Thr Gly Lys
100

<210> 39
<211> 661
<212> DNA
<213> Rattus norvegicus

<400> 39
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aggcagacag aggtcatgga agagaccagg ctcagaaaca gccccaccat gcacagcggg 180
atgttttccc accaagggca acatgcaaag ccaggtatcc acatgggtag agtagaaagt 240
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cctaaagaga tttcttcaaa cgatatataa agaaggccac caagcatata aaacatgtga 480
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agccactaaa aaagagtaag actcacaagg acatgggcac ttctaattctc tgtgcactgc 600
tgccaggaca tacaatagtg tggtcactat ggagactacg gcagtgccta ctaataacag 660
c 661

<210> 40
<211> 661
<212> DNA
<213> Rattus norvegicus

<400> 40
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aggcagacag aggtcatgga agagaccagg ctcagaaaca gccccaccat gcacagcggg 180
atgttttccc accaagggca acatgcaaag ccaggtatcc acatgggtag agtagaaagt 240
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taaaatcaag tttcctaggg caagctgtag taggctccct tgggtgggtt aatgcttttg 360
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cctaaagaga tttcttcaaa cgatatataa agaaggccac caagcatata aaacatgtga 480
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agccactaaa aaagagtaag actcacaagg acatgggcac ttctaattctc tgtgcactgc 600
tgccaggaca tacaatagtg tggtcactat ggagactacg gcagtgccta ctaataacag 660
c 661

<210> 41
<211> 893
<212> DNA
<213> Rattus norvegicus

<400> 41
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atgtggtagc aaggtgggag cagagaactc gcaagctgag cagagccttc ggggtccctt 240
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<210> 42
 <211> 1131
 <212> DNA
 <213> *Rattus norvegicus*

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<400> 42
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<210> 43
 <211> 1994
 <212> DNA
 <213> *Rattus norvegicus*

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<400> 43
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accgctcac ctgctcccc cagcccagca gaggttttct acaatccctc ctgctccct 180
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<210> 44

<211> 1850

<212> DNA

<213> *Rattus norvegicus*

<400> 44

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gggtatttca	ccctcattta	caaccaaggc	tttgagattg	tgttgaatga	ctacaagtgg	360
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<213> *Rattus norvegicus*

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<212> DNA

<213> *Rattus norvegicus*

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